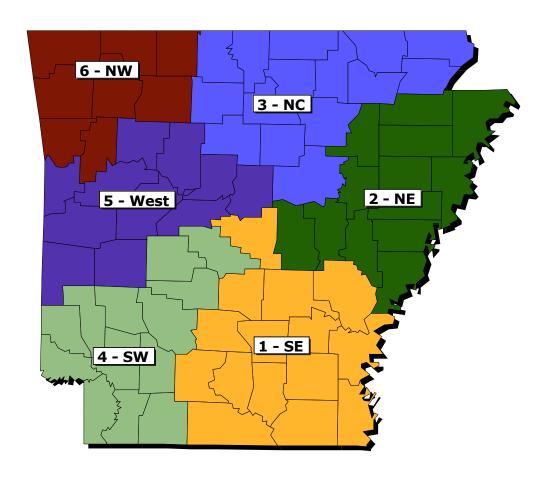
FCC RURAL HEALTH PILOT PROGRAM

ARKANSAS TELEHEALTH OVERSIGHT & MANAGEMENT



QUARTERLY REPORT

OCTOBER 2011 - DECEMBER 2011



FCC Rural Health Care Pilot Program

Updated items appear in this font color.

In response to the Federal Communications Commission (FCC) Rural Health Care Pilot Program, major information technology and healthcare service organizations allied within the State of Arkansas to create the framework for a fully-connected and efficiently-managed statewide telehealth system named the Arkansas Telehealth Network.

This partnership is managed by a Board of Directors, led by the University of Arkansas for Medical Sciences (UAMS) in alliance with Baptist Health (BH), the Arkansas Hospital Association (AHA), and the Department of Health(ADH). As the primary stakeholders in the proposed statewide telehealth initiative, these organizations in concert with Arkansas' public and private non-profit healthcare organizations have amassed the collective expertise to launch the proposed ATOM effort to create a comprehensive and inclusive telehealth solution for the entire state with an emphasis on the rural Arkansas Delta. Cooperatively, ATOM selected UAMS to be the legal entity for this project. Leveraging the leadership of all major health care facilities in the state, ATOM will achieve its mission to optimize telehealth services in Arkansas through statewide direction and partnership.

This is a report for the fourth calendar quarter of 2011: October - December

1. Project Contact and Coordination

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Agency Procurement Official

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In Arkansas, the FCC Rural Health Care Pilot is coordinated through a consortium of public and private-non-profit health and information technology organizations called Arkansas Telehealth Oversight and Management (ATOM). Efforts are guided through a Board of Directors, an Advisory Committee and sub-committees of interested organizations. The project is coordinated by Bruce Thomasson, a part-time employee of UAMS. On days in which Mr. Thomasson is not employed, the project is covered by Tracie Hill (501-526-7678) in the Business Office of the UAMS Center for Distance Health.

2. Appendix D, Data Item #2: Identify all health care facilities included in the network

Our original list of 311 sites have been redistributed between the FCC Pilot Project and the Broadband Technology Opportunities Program; and additional sites have been added to the network. All acute care hospitals, local health units, Area Health Education Centers have migrated to BTOP funding. With BTOP funding the network will extend to 444 sites including additional medical partners, all two- and four-year colleges in the state, and health kiosks in several regional libraries.

- Coding for Public-Private and Profit Status
 - **P-N-P** = Private Non Profit
 - **GOVT** = Public Non Profit
 - **Profit** = Private For Profit
- Eligible Provider Type:
 - **(C)** Clinics = Not-for-profit health clinics
 - **(CHC)** = Community Health Centers of Arkansas Clinics (HRSA-supported Federally Qualified Health Centers).
 - (MH) Mental Health Facilities = A non-profit community program certified by the Division of Behavioral Health Services as a community mental health center.
 - **(ME)** Medical Education = Post-secondary medical education programs
 - **(T)** Therapy Center = Off-site Medicare-approved provider-based physical therapy department of a hospital.
- Site
- Street = Street address of the site
- <u>County</u> = County where the site is located

• <u>City</u> = City where the site is located

All listed sites are eligible under the rules of the FCC Pilot Project.

Туре	Site Name	Street	City	County
С	Ashley Health Services (Ashley Co Medical Center)	1003 Fred LaGrone Drive	Crossett	Ashley
С	Ashley Health Services (Ashley Co Medical Center)	313 Alabama Street	Crossett	Ashley
С	Baptist Health Anderson Medical Clinic	1310 North Center Street	Lonoke	Lonoke
С	Baptist Health Brinkley Medical Clinic	110 North New York Street	Brinkley	Monroe
С	Baptist Health Clarendon Medical Clinic	198 South Main Street	Clarendon	Monroe
С	Baptist Health Family Clinic - Beebe	47 Hwy 64 West	Beebe	White
С	Baptist Health Family Clinic - Cabot	205 Westport Drive	Cabot	Lonoke
С	Baptist Health Family Clinic - Greer's Ferry	8544 Edgemond Road	Greers Ferry	Cleburne
С	Baptist Health Family Clinic - Malvern	1002 Schneider, Suite 104	Malvern	Hot Spring
С	Baptist Health Family Clinic - Maumelle	1701 Club Manor Road, Suite	Maumelle	Pulaski
С	Baptist Health Family Clinic - Perryville	313 W. Main Street	Perryville	Perry
С	Baptist Health Family Clinic- England	221 NE 2nd Street	England	Lonoke
С	Baptist Health Hazen Family Medi- cal Clinic	151 S. Livermore	Hazen	Prairie
С	Baptist Health Stuttgart Medical Clinic	1609 N. Medical Drive	Stuttgart	Arkansas
С	Baptist Health Surgery and Ortho- pedic Clinic - Arkadelphia	2910 Cypress	Arkadelphia	Clark
С	Baxter Regional Medical Center - Ahrens Clinic	414 West Old Main Street	Yellville	Marion
С	Baxter Regional Medical Center - Ash Flat Clinic	970 Ash Flat Drive	Ash Flat	Sharp
СНС	CHCA - Boston Mountain Rural Health Center - Clinton	465 Medical Center Parkway	Clinton	Van Buren
СНС	CHCA - Boston Mountain Rural Health Center - Deer	HC31, Box 310	Deer	Jasper

Туре	Site Name	Street	County	
СНС	CHCA - Boston Mountain Rural Health Center - Fairfield Bay	110 Village Lane	Fairfield Bay	Van Buren
СНС	CHCA - Boston Mountain Rural Health Center - Green Forest	1103 West Main Street	Green Forest	Carroll
СНС	CHCA - Boston Mountain Rural Health Center - Marshall	2263 Hwy 65 North	Marshall	Searcy
СНС	CHCA - CABUN - Bearden Health Center	150 School Street	Bearden	Ouachita
СНС	CHCA - CABUN Rural Health Services - Amity	329 North Hill	Amity	Clark
СНС	CHCA - CABUN Rural Health Services - Hampton	402 South Lee	Hampton	Calhoun
СНС	CHCA - CABUN Rural Health Services - Hope Migrant Center	205 Smith Road, Suite D	Норе	Hempstead
СНС	CHCA - CABUN Rural Health Services - Lewisville	1117 Chestnut	Lewisville	Lafayette
СНС	CHCA - CABUN Rural Health Services - Strong Clinic	253 South Concord	Strong	Union
снс	CHCA - Community Clinic - Rogers	1114 Poplar Place	Rogers	Benton
СНС	CHCA - Corning Area Healthcare, Inc Corning	1300 Creason Road	Corning	Clay
СНС	CHCA - Corning Area Healthcare, Inc Pocahontas	141 Betty Drive	Pocahontas	Randolph
СНС	CHCA - Corning Area Healthcare, IncWalnut Ridge	3219 N. Hwy 67B,	3219 N. Hwy 67B, Walnut Ridge	
СНС	CHCA - East Arkansas Family Health Center, Inc - Lepanto			Poinsett
СНС	CHCA - East Arkansas Family Health Center, Inc - West Memphis	215 East Bond Ave.	West Memphis	Crittenden
СНС	CHCA - Healthy Connections - W.A.T.C.H. Clinic	1201 S. Mena Street Mena		Polk
СНС	CHCA - Jefferson Comprehensive Care - Altheimer Clinic	309 South Edline	Altheimer	Jefferson
СНС	CHCA - Jefferson Comprehensive Care - College Station Clinic	4206 Frazier Pike	College Station	
СНС	CHCA - Jefferson Comprehensive Care - Pine Bluff Clinic	1101 Tennessee Street	Pine Bluff	Jefferson
СНС	CHCA - Jefferson Comprehensive Care - Redfield Clinic	113 West River Road	Redfield	Jefferson

Type	Site Name	Street	County	
СНС	CHCA - Jefferson Comprehensive			
	Care - Rison Clinic	505 Sycamore Street	Rison	Cleveland
СНС	CHCA - Lee County Cooperative - Hughes Clinic	6		c ·
	CHCA - Lee County Cooperative -	503 South Broadway	Hughes	St. Francis
CHC	Madison Clinic	302 Martin Luther King	Madison	St. Francis
СНС	CHCA - Lee County Cooperative - Marianna Clinic	530 West Atkins Blvd.	Marianna	Lee
СНС	CHCA - Mainline Health Systems - Dermott Medical Clinic	300 S. School Street	Dermott	Chicot
СНС	CHCA - Mainline Health Systems - Eudora Medical Clinic	579 E. Beouff	Eudora	Chicot
СНС	CHCA - Mainline Health Systems - Portland Medical Clinic	233 North Main	Portland	Ashley
СНС	CHCA - Mainline Health Systems - Wilmot Medical Clinic	203 McComb	Wilmot	Ashley
СНС	CHCA - Mid-Delta Health - Clarendon	401 Midland Street	Clarendon	Monroe
СНС	CHCA - River Valley Primary Care - Fort Smith Northside	4900 Kelly Highway Fort Smith		Sebastian
СНС	CHCA - River Valley Primary Care - Ratcliff	9755 West State Hwy 22	Ratcliff	Logan
С	Community Medical Center Clinic of Calico Rock	103 Grasse Street	Calico Rock	Izard
С	Community Medical Center Clinic of Horseshoe Bend	805 Third Street	Horseshoe Bend	Izard
С	Community Medical Center Clinic of Melbourne	203 Tate Spring Road	Melbourne	Izard
С	Conway Regional - Greenbrier Clinic	110 North Broadview	Greenbrier	Faulkner
С	Conway Regional - Mayflower Clinic	587 Hwy 365	Mayflower	Faulkner
С	Conway Regional - Reddy Clinic - Clinton	2526 Hwy 65 South	Clinton	Van Buren
С	Crittenden - Mid-South Multi-			
<u> </u>	specialty Clinic	228 Tyler Street	West Memphis	Crittenden
С	Crittenden - Mid-South Pediatrics	2921 Hwy 77	Marion	Crittenden
С	Crittenden - Riverside Rural Health Clinic	105 Nathan Street Marked Tree		Poinsett
С	Lawrence Health - Walnut Ridge Clinic	1309 West Main Street	Walnut Ridge	Lawrence

Туре	Site Name	Street	City	County
С	Montgomery County Community Clinic	534 Luzerne Street	Mt. Ida	Montgomery
С	Scott County Medical Clinic	1331 West 6th Street	Waldron	Scott
С	St. Edward Mercy Clinic - Van Bu- ren	2800 Fayetteville Road	Van Buren	Crawford
С	SVHS - St. Vincent Health System - Carfagno Clinic	1900 Club Manor Drive, Ste	Maumelle	Pulaski
С	SVHS - St. Vincent Health System - Chenal	1811 Rahling Road, Suite 120	Little Rock	Pulaski
С	SVHS - St. Vincent Health System - Internal Medicine Clinic	1100 N. University, S-I	Little Rock	Pulaski
С	SVHS - St. Vincent Health System - Jacksonville	1110 West Main Street	Little Rock	Pulaski
С	SVHS - St. Vincent Health System - Rodney Parham Rd.	10000 Rodney Parham Road	Little Rock	Pulaski
С	SVHS - St. Vincent Health System - South Clinic	4202 S. University	Little Rock	Pulaski
С	SVHS - St. Vincent Health System - Wildwood Medical Clinic	2215 Wildwood Ave, Suite	Sherwood	Pulaski
С	SVHS - St. Vincent Health System East 6th	2500 E. 6th Street	Little Rock	Pulaski
С	Twin Cities Medical Clinic	103 Huntington Avenue	Mansfield	Scott
С	WCMC - White County Medical Center - West Clinic	2505 West Beebe-Capps	Searcy	White
С	WRMC - White River Med Center - Cave City Clinic	301 South Main Street	Cave City	Sharp
С	WRMC - White River Med Center - Drasco Clinic	68 Greers Ferry Road	Drasco	Cleburne
С	WRMC - White River Med Center - Melbourne Clinic	1110 Main Street Melbourne		Izard
С	WRMC - White River Med Center - North Complex	195 Hospital Drive	Cherokee Village	Sharp
С	WRMC - White River Med Center - Pleasant Plains Clinic	6200 Batesville Boulevard	Pleasant Plains	Independ- ence
С	WRMC - White River Med Center - Strawberry Medical Clinic	58 East River Drive	Strawberry	Lawrence
ME	Baptist Health Schools Little Rock	11900 Colonel Glenn Road Little Rock		Pulaski
МН	Centers for Youth & Families - Jacksonville	511-8 Stonewall Square	Jacksonville	Pulaski

Туре	Site Name	Street	City	County
МН	Centers for Youth & Families -		North Little	
	North Little Rock	901 Parker	Rock	Pulaski
МН	Community Counseling Services, IncArkadelphia	201 N. 26th Street	Arkadelphia	Clark
МН	Community Counseling Services, IncMalvern	1615 Martin Luther King Blvd.	Malvern	Hot Spring
МН	Community Counseling Services, IncWest Grand	505 W. Grand Avenue	Hot Springs	Garland
мн	Counseling Clinic Inc.	307 East Sevier Street	Benton	Saline
мн	CSEA - Brinkley Clinic	490 Broadmoor Drive	Brinkley	Monroe
мн	CSEA - Helena Clinic	801 Newman Drive	Helena	Phillips
мн	CSEA - Jonesboro - Browns Lane	2707 Browns Lane	Jonesboro	Craighead
мн	CSEA - Marianna Clinic	444 Atkins Street	Marianna	Lee
МН	CSEA - West Memphis Clinic	905 North 7th Street West Mer		Crittenden
МН	CSEA - Wynne Clinic - Addison	661 Addison Drive	Wynne	Cross
мн	DCA - Delta Counseling Associates - Monticello	790 Roberts Drive	Monticello	Drew
мн	HRA - Ash Flat Clinic	1714a Ash Flat Drive	Ash Flat	Sharp
мн	HRA - Batesville Clinic	1800 Myers Street	Batesville	Independ- ence
мн	HRA - Clinton Clinic	1303 Hwy 65 South, Ste #7	Clinton	Van Buren
МН	HRA - Harrison Behavioral Health Clinic	724 North Spring	Harrison	Boone
мн	HRA - Heber Springs Behavioral Health Clinic	1716 W. Searcy	Heber Springs	Cleburne
МН	HRA - Jasper Behavioral Health Clinic	504 West Court, Room 110	Jasper	Newton
МН	HRA - Marshall Behavioral Health Clinic	200 East Main	Marshall	Searcy
мн	HRA - Melbourne Behavioral Health Clinic	1109 E. Main	Melbourne	Izard
МН	HRA - Mountain Home Behavioral Health Clinic	# 8 Medical Plaza	Mountain Home	Baxter

Туре	Site Name	Street	County	
мн	HRA - Mountain View Behavioral			
14111	Health Clinic	211 Blanchard Ave	Mountain View	Stone
мн	HRA - Newport Behavioral Health Clinic	1507 Pecan Street	Newport	Jackson
МН	HRA - Searcy Behavioral Health Clinic	3218 E. Moore	Searcy	White
МН	HRA - Yellville Behavioral Health Clinic	319 Highway 14 South,	Yellville	Marion
МН	LRCMHC - Little Rock Community Mental Health - Pinnacle	1020 W. Daisy Gatson Bates	Little Rock	Pulaski
МН	MSHS - Mid-South Health Systems -	2920 McClellan	Jonesboro	Craighead
МН	MSHS - Mid-South Health Systems Corning	602 David Street	Corning	Clay
мн	MSHS - Mid-South Health Systems Jonesboro	2707 Browns Lane	Jonesboro	Craighead
мн	MSHS - Mid-South Health Systems Paragould	28 Southpoint Drive Paragould		Greene
МН	MSHS - Mid-South Health Systems Pocahontas	2560 Old County Road Pocahontas		Randolph
МН	MSHS - Mid-South Health Systems Walnut Ridge	102 South Larkspur Walnut Ridge		Lawrence
мн	Ozark Counseling - Bentonville	2508 S.E. 20th Street	Bentonville	Benton
мн	Ozark Counseling - Berryville	208 Hwy 62 West		
МН	Ozark Counseling - Fayetteville	,		Washington
мн	Ozark Counseling - Huntsville	701 Phillips, Suite 1	Huntsville	Madison
МН	Ozark Counseling - Siloam Springs			Benton
МН	Ozark Counseling - Springdale	2466 S. 48th Street Springdale		Washington
МН	Professional Counseling Associates	North Little 4354 Stockton Drive Rock		Pulaski
МН	South Arkansas Regional Health Center	715 North College El Dorado		Union
МН	Southeast Arkansas Behavioral Healthcare System	2500 Rike Drive	Pine Bluff	Jefferson
МН	WACGC - Booneville	174 North Welsh	Booneville	Logan
МН	WACGC - Mena	307 South Cherry	Mena	Polk

Туре	Site Name	Street	City	County
МН	WACGC - Paris	415 South 6th Street	Paris	Logan
МН	WACGC - Van Buren	2705 Oak Lane	Van Buren	Crawford
т	Baptist Health Occupational Health Center	6800 Lindsey Road	Little Rock	Pulaski
т	Baptist Health Therapy Center - Bryant	4411 Hwy 5 North	Bryant	Saline
Т	Baptist Health Therapy Center - Conway	815 Hogan Lane, Suite 5	Conway	Faulkner
Т	Baptist Health Therapy Center - Fairfield Bay	381 Dave Creek Parkway	Fairfield Bay	Van Buren
Т	Baptist Health Therapy Center - Heber Springs	2101 Hwy 25 North	Heber Springs	Cleburne
Т	Baptist Health Therapy Center - Jacksonville	117 Gregory Place	Jacksonville	Pulaski
Т	Baptist Health Therapy Center - Lonoke	1306 North Center Street	Lonoke	Lonoke
Т	Baptist Health Therapy Center - Searcy	720 Marion, Suite 102	Searcy	White
Т	Baptist Health Therapy Center - Sheridan	1409 South Rock, Suite D	Sheridan	Grant
Т	Baptist Health Therapy Center - Sherwood	2001 E. Kiehl #7	Sherwood	Pulaski
Т	Baptist Health Therapy Center - Stuttgart	2118 S. Buerkle	Stuttgart	Arkansas
МН	CAI - Counseling Associates Inc - Clarksville *	1021 Poplar Street	Clarksville	Arkansas
МН	CAI - Counseling Associates Inc - Conway *	350 Salem Road	Conway	Arkansas
МН	CAI - Counseling Associates Inc - Morrilton *	8 Hospital Drive	Morrilton	Arkansas
мн	CAI - Counseling Associates Inc - Russellville *	130 Skyline Drive	Russellville	Arkansas

3. Network Narrative

A Network Design RFP was posted in March 2010, drawing three responses. The ATOM Board recommended the award go to the lowest bidder, EDI of Atlanta, Georgia; the same firm that designed a similar project in Louisiana.

The proposed design was presented to the ATOM Board and ATOM Network Design Team on December 22, 2010. After minor modifications, the design was accepted in March 2011.

EDI was also chosen as the network designer for sites funded through the Broadband Technology Opportunities Program (BTOP). The BTOP portion has now been completed. The following map shows all 474 sites that will be connected through the FCC Rural Healthcare Pilot and the Broadband Technologies Opportunities Partnership Program.

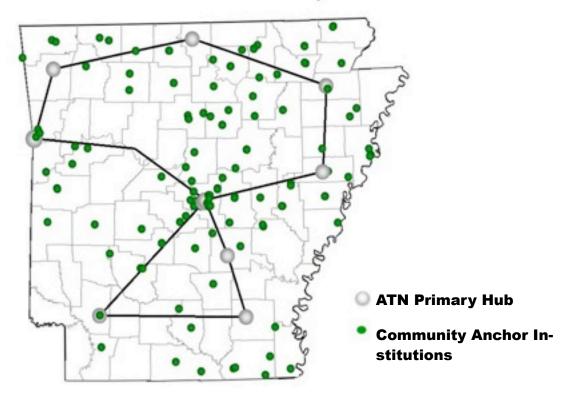


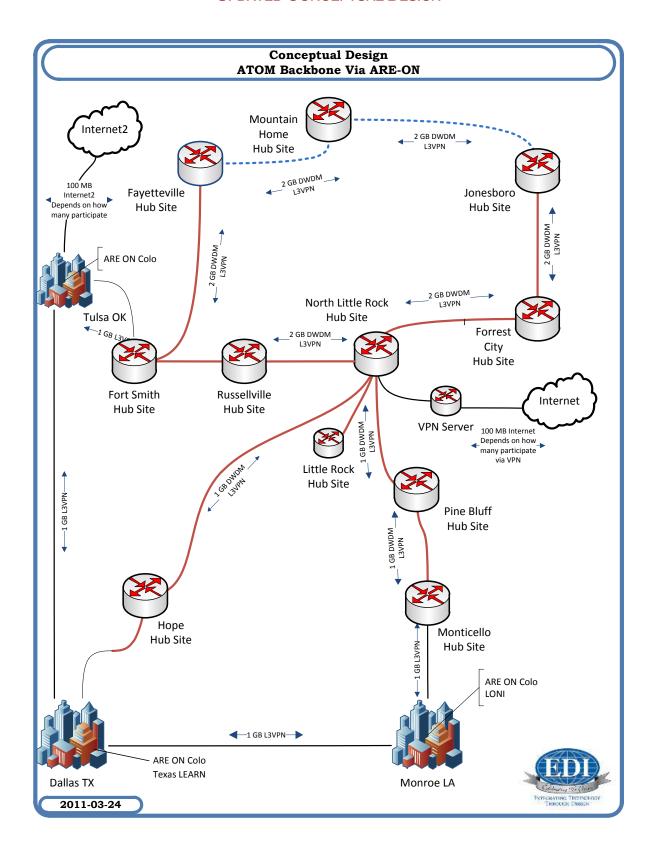
Arkansas Research Education and Optical Network (AREON) will provide a statewide fiber backbone that will link the hubs of the ATOM Network and provide connectivity to Internet2. Connections will be made from Fort Smith to Tulsa, OK; Hope to Dallas, TX; and Monticello to Monroe, LA.

During the first calendar quarter of 2011 the design was updated to include hubs at Russellville and Little Rock as well as some of the connecting bandwidth.

Initially we had expected to connect directly to each of the 90+ Local Health Units (LHUs) of the Arkansas Department of Health (ADH). After thorough study, it was decided that the Arkansas Telehealth Network will install a fiber connection between between the ADH Central Office (4815 West Markham in Little Rock) and the network management site at UAMS (4301 West Markham) - through an existing underground conduit. Connections between the ADH Central Office and their LHUs will be expanded through and MPLS cloud arrangement funded through the Broadband Technology Opportunities Program (BTOP).

Arkansas Telehealth Network ATOM/FCC Sites





Number of miles of fiber construction and whether this fiber if buried or aerial: Undetermined at this time.

4. List of Connected Health Care Providers

As of December 31, 2011 we have not yet connected any health care providers to the ATOM network.

5. Identify the following non-recurring and recurring costs.

No change this quarter

6. Describe how costs have been apportioned and the sources of the funds to pay them:

Other than the network design, we have not yet applied for nor accrued any eligible project expenses.

7. Identify any technical or non-technical requirements or procedures necessary for ineligible entities to connect to the participant's network.

Unknown at this time. Once the network design has been conducted we will itemize any technical or non-technical requirements or procedures required by these sites.

8. Provide an update on the project management plan

A. Management Structure of ATOM

Board of Directors

- Arkansas Department of Health; Ann Purvis, Deputy Director of Administration
- Baptist Health; David House, Vice President and CIO
- DeWitt Hospital; Darren Caldwell, CEO
- Magnolia Regional Medical Center; Margaret West, CEO
- University of Arkansas for Medical Sciences; Dr. Curtis Lowery, Director OBGYN and Director of the UAMS Center for Distance Health

Staff

- Bruce Thomasson, ATOM Project Coordinator, UAMS | 501.554.6359
- Roy Kitchen, Business Administrator, UAMS | 501.686.6227
- Tracie Hill, Grants and Contracts Manager, UAMS | 501.526.7678
- Shirley Anthony, Invoice Processing, UAMS | 501.526.7504

The ATOM Board of Directors meets on the first Wednesday of each month. The ATOM Advisory Committee meets on the first Tuesday of each month. Sub-committees meet as necessary. Current sub-committees include: Network Design, Communications, Project Management & Finance, and Applications & Outcomes.

B. Detailed Project Plan and Scope:

We plan for the network design to be completed in regional stages. Regional implementation will allow us to connect to the AREON fiber backbone and minimize the expense of crossing LATA (Local Access Transport Area) boundaries.

Commitment Deadline:

- On February 18, 2010 the FCC Wireline Bureau issued a one year extension to twenty-one requesting pilot projects, including the Arkansas Telehealth Network.
 This decision extends until June 30, 2011 the deadline for committing pilot project funds.
- On December 6, 2010, the FCC posted notice that the Indiana Telehealth Network
 had requested an additional one year extension of the commitment deadline until
 June 30, 2012. At the close of the current calendar quarter, the Arkansas Telehealth
 Network was preparing comments in support of the Indiana request, and also requesting an additional one year extension for our project.
- On January 4, 2011 UAMS, on behalf of Arkansas Telehealth Network, requested a one year extension of the commitment deadline to June 30, 2012. We fully intend to commit all remaining funds prior to this date.

Invoicing Deadline:

- On December 9, 2010, the FCC posted notice that the Michigan Public Health Institute requested and extension of the five year (from first FCL) invoicing deadline. As the quarter ended, Arkansas was preparing comments in support of the Michigan request and to file a request of our own.
- On June 20, 2011 UAMS, on behalf of the Arkansas Telehealth Network, requested a three year extension of the invoicing deadline to July 14, 2018.

With the network design behind us and a clear strategy for use of FCC and BTOP funds, we expect network development to be more predictable and achievable. Our Installation/ Implementation RFP was posted on 24 August 2011. Bids were initially set to be opened on 20 October 2011. Due to the complexity of the bid, vendors requested additional time to respond and were given an additional 11 working days. Seven bids were received by close of business, 4 November 2011.

The FCC Pilot bid and the BTOP-Stimulus bid were released at approximately the same time and have been reviewed by two separate groups of raters. At the time of this report the bids were still undergoing consideration, though resolution is expected shortly.

Task	Target Start	Target Completion
Network Design	7/15/10	3/15/11
Refine Sustainability Plan	1/5/09	10/15/11
Develop Network Implementation RFP	2/1/11	8/2/11
USAC/FCC Review of Implementation RFP	8/3/11	8/17/11
Implementation bid on the street	8/24/11	11/04/11
Implementation review and award	11/04/11	2/21/12
Contract finalized	2/21/12	3/21/12
Installation / Implementation	3/21/12	4/21/13

3. Provide detail on whether network is or will become self sustaining

The fully expect the network will be self sustaining. Initial development (network design, installation and initial recurring line charges will be paid from the FCC RuralHealthcare Pilot Project (\$4.2 million) and the Broadband Technologies Opportunity Program (\$102 million). Once initial line subsidies have been fully depleted, ongoing line charges and network management will be maintained through fees charged to network member organizations. Full details are included in the Sustainability section of this report.

SUSTAINABILITY SUMMARY

Once we know the actual on-going costs of the network, we will produce a major re-write of this sustainability plan.

Arkansas Telehealth Oversight and Management (ATOM) is a strategic partnership of health and information technology organizations dedicated to establishing and managing a single, unified statewide telehealth network linking all medical resources in the State. Telehealth services are essential infrastructure costs in order to provide urban health resources for rural residents. This infrastructure is necessary to reduce the increased morbidity and mortality of rural areas and necessary to attract industry and business opportunities to rural Arkansas. The availability of healthcare is no less important to a community than the availability of roads, bridges, water and electricity.

Initial development of the Arkansas Telehealth Network has been provided through a funding commitment from the Federal Communications Commission. The FCC Universal Service Program has committed \$4.2 million and the University of Arkansas for Medical Sciences has committed \$745,000 in matching funds. These contributions will be used to design, construct and pay operational costs through the first thirty-six months of the project.

- 1. Initial Sources of 15% Match: The University of Arkansas for Medical Sciences (UAMS), the lead agency of ATOM, has agreed to provide the 15% cash match (\$744,298) for the FCC Pilot Project.
- 2. Commitments from Network Members: Once all FCC Pilot Project funding for eligible sites has been fully expended, billing will be shifted from UAMS to the member institution and the member institution will be responsible for those line charges from that point forward. Numerous opportunities exist for a member to recover costs of the system as identified in later sections of this plan.

It is recommended that the member look to these sources of continuation funding and cost-shifting:

a. Medicaid/Medicare remote site reimbursement (reimbursed at \$23.75 per visit). Additional methods of funding membership fees are discussed in later sections of this report.

- 3. Sustainability Period: Projections in this plan have been prepared for a 10+ year period. We intend to establish projections of 15-20 years as the project continues to develop.
- 4. Budget: Budgets projections for a 10+ year period are included in this plan.
- 5. a. Use of Network by Non-Eligible Entities: All members of our network are healthcare entities. At present we have only one known ineligible member, a forprofit hospital. It is understood that this and any/all other participants which are not eligible for the pilot project must pay 100% of their share of costs.
 - b. Fee Structure/Fair Share: Fees to ineligible entities will be calculated to equal 100% of the cost of the services provided to that entity. We expect network design costs to be calculated at a flat rate per site an ineligible site would pay that same rate. The only ineligible site we have is urban. We will calculate a set rate of recurring costs for rural and urban sites. This ineligible site (and any others that come along) must pay their fair share of network design and recurring network costs.
 - c. Use of Network for Commercial Purposes: This network will be used 100% for medical services. The network will not be used for any commercial purpose.
- 6. Management of the Network: The existing UAMS Network Management Center is currently staffed with six (6) FTEs who manage video conferences and handle hot-line support for video conferences in session. We expect to add three (3) additional FTEs as the network expands. All projected network management costs are included in the budgets of this plan.
- 7. Assumptions of Continued RHC Funding: We do not assume nor expect to request any "regular program" funding for continued support of the ATOM network after completion of pilot project funding.
- 8. State and Federal Funding: Continuation of the ATOM network is not dependent on any state or federal appropriation. We intend to request state and federal funds for end-user equipment and network expansion, but those requests will be over and above the day-to-day operational support of the ATOM network.
- 9. Prepaid Lease Option: We expect to lease most or all of the new network. This issue will be better addressed after the network design is completed. We intend that any IRUs we establish will be for a 15 year minimum (preferably 20 year) and we hope to limit prepaid leases to 1 year increments to be renewable annually. How-

ever, we will consider more economical initial leases with 3 year renewable terms if they are advantageous to the project.

10. Up Front Charges and Monthly Lease Charges: It is recognized and understood that there will be no invoicing for any equipment or services for any location until after the installation and services have commenced.

We expect to follow Scenario #9 from the Excess Bandwidth and Excess Capacity Guidance Document issued 17 March 2009:

Scenario 9. Participant Enters Into a Prepaid Lease

Excess capacity is not likely to be an issue in prepaid leases. The participant must exercise due diligence in contracting for the dedicated network, and although pricing is established by competitive bidding, participants should be able to demonstrate to USAC, an auditor, or the FCC, that there was no misuse of universal service funds, especially in a competitive bidding situation with only one bid. Prepaid leases should have specific service quality provisions, and provisions to require the return of unearned lease payments by the vendor if the vendor is in breach of the lease. If the cost of the lease includes significant one-time charges (for construction of fiber, such as last mile connections), then the participant should consider a combination of owning the fiber (or an IRU on the fiber), and a prepaid lease for services.

BUSINESS DESCRIPTION & SUSTAINABILITY DETAILS

Business Philosophy

Working collaboratively, groups of hospitals are positioned to implement and operate advanced telehealth systems more effectively and for a lower cost than hospitals or programs can individually. ATOM can achieve significant savings by managing the network on a cost recovery basis; negotiating volume discounts for service and equipment; sharing a central data center, servers, and other hardware; and sharing staff and training expenses.

Ultimately, ATOM's mission is to provide small community hospitals and clinics with essential, life-saving health resources from large and medium sized medical centers. This is achieved by creating mechanisms which distribute medical expertise across the entire state population, reducing unnecessary patient transportation, promoting process improvement, and improving utilization of available resources.

Strengths:

- ATOM represents 387 health endpoints (hospitals, clinics, therapy centers, medical education facilities and mental health centers), including 137 sites funded to be funded by the FCC Rural Health Pilot Project. As such, this alliance is one of the most broad based health partnerships in the State.
- ATOM partners currently manage networks which include individual hospitals, multiple hospital chains, all acute care hospitals and all state-funded clinics in Arkansas.
- ATOM partners have a strong voice in state healthcare policy individually and collectively.

Day-to-Day Operational Relationships

ATOM is governed by a Board of Directors consisting of three permanent members and two members appointed by the Arkansas Hospital Association:

- Arkansas Department of Health
- Baptist Health
- University of Arkansas for Medical Sciences
- De Witt Hospital (appointed)
- Magnolia Regional Medical Center (appointed)

A thirteen member Advisory Committee and a part-time project manager guide day-to-day operations:

- Arkansas Association of Two Year Colleges
- Arkansas Center for Health Information
- Arkansas Department of Health
- Arkansas Department of Human Services
- Arkansas Department of Information Services
- Arkansas Foundation for Medical Care
- Arkansas Hospital Association
- Arkansas Office of Health Information Technology
- Baptist Health
- Arkansas Research Education & Optical Network
- Community Health Centers of Arkansas
- Mental Health Council of Arkansas
- St. Vincent Health System
- University of Arkansas for Medical Sciences

Other Relationships:

ATOM has established relationships with other organizations working to increase the availability of broadband throughout Arkansas. We are working closely with two organization created by state statute in 2007:

The Arkansas Broadband Advisory Council develops policies to expand broadband deployment in the State and makes recommendations to the Governor and Legislature to support broadband implementation. Established by state legislation in 2007, the Council has on three occasions requested presentations on the ATOM project and have been very supportive of our plans. In February 2009 the Council requested that ATOM prepare a proposal for stimulus funding to be submitted through the Arkansas Governor's Office.

Connect Arkansas is a private non-profit corporation created by the same act that created the Broadband Advisory Council. Connect Arkansas has been funded to map, plan and influence public attitude toward the need for broadband in Arkansas.

PRODUCTS AND SERVICES

The Arkansas Telehealth Network will provide the infrastructure to support a wide variety of clinical and management services. These services will provide a base on which member institutions may recover ongoing network costs. The following list includes existing and propose telemedicine applications which will run across the network. Existing services are denoted with an asterisk (*).

Telehealth Services				
Obstetrics* & Neonatology*	The ANGELS program at UAMS provides a 24-hour support for physicians to consult with maternal-fetal medicine specialists when requested regarding patient management issues. PEDS Place provides weekly interactive continuing education in pediatrics.			
Remote Patient Evaluation	Allows specialists at large medical centers to provide expert guidance to rural physicians and hospitals; serious cases are moved to larger medical centers; less serious cases are managed in their home communities.			

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Remote Patient Monitoring*	Baptist Health in Little Rock remotely monitors intensive care patients in four hospitals around the state and plans to expand the program.
Prison Telemedicine*	Reduces prison medical expenses by providing on-site patient evaluation.
Electronic Health Records*	Provides clinicians with secure access to patient records over the web. At this point in time, some portions of medical records are shared electronically.
Patient education*	Provides ability to customize the latest patient education documents from a central source.
Sonography*	Fetal ultra-sonograms are moved across existing networks as part of real-time store-and-forward information systems.
Tele-Neurology*	Neurologists from Fort Smith and Little Rock are able to provide 24x7 acute stroke interven- tion in nine rural emergency departments.
Tele-Pharmacy*	Remotely dispensing pharmaceuticals reduces costs without risking safety. The White River Medical Center in Batesville remotely manages medication in the Stone County Medical Center in Mountain View.
Tele-Psychiatry / Mental Health*	Telehealth Services are currently being used to match patients with mental health specialists for remote counseling sessions.
Tele-Radiology*	The remote interpretation of x-rays, CT scans and MRIs is commonly used throughout Arkansas, providing rapid interpretation of diagnostic images.
Facility M	anagement Services
New service provision models	Allows development of specialized remote medical applications which improve care in rural areas, reduce costs and make better use of centralized medical resources.
Quality Improvement	Automates quality management and reporting requirements for utilization, risk management, infection control and accreditation reviews.

Facilitates required health reporting from physicians and medical centers to the Department of Health	Automates disease surveillance systems, providing more timely recognition of disease outbreaks.
Emergency Preparedness	Allows simultaneous connections to medical infrastructure in times of emergency, coordinating statewide medical response.
Physician Practice Management	Supports patient account management and insurance processing for physician practices and clinics

ORGANIZATION, MANAGEMENT AND PERSONNEL

The University of Arkansas for Medical Sciences currently provides telehealth network management to 50 sites across several networks that will be assimilated into ATOM. Existing personnel, under the supervision of Chief Technology Officer Rhonda Jorden, will form the core of ATOM network management as we extend to 424 total health sites, 141 of which are included in the rural health care pilot. [Please note that the FCC-subsidized lines will run from the eligible health care facility to a hub on Arkansas' Internet2 (ARE-ON) backbone. There is no intermingling of FCC and BTOP funded lines.}

The UAMS Network Management Center is currently staffed with six (6) FTEs who manage video conferences and handle Hot Line support for video conferences in session. As the build-out extends to 424 health sites we expect to add three (3) additional FTEs, assuming:

- a) The Network Management Center will handle scheduling, monitoring a and trouble-shooting of video conferences (24x7x365) and support multi-site conferencing (bridges, gatekeepers, scheduling software, etc.).
- b) The Rural Health Care pilot project does not include any end-user equipment. Obviously, if sites are not able to find the funding for telehealth equipment and applications, fewer network management staff would be required.
- c) It is projected that support for end-user video conference equipment and routers at the remote location will be handled through 3rd party contract. Plans for this will be included in all discussions regarding network deployment.

MARKETING PLAN

ATOM represents 424 health sites, including hospitals, clinics and mental health centers in a state which is largely medically under-served. As such, this alliance represents the bulk of medical institutions in the state and will use the influence of its member organizations to promote the development and support of statewide telehealth services.

ATOM members will seek to inform state and community policy leaders about the benefits which telehealth brings to small rural communities. Recent polls show 82% of Americans in favor of public works projects to stimulate the economy and 77% support initiatives to increase access to high quality health care¹. 61% agree that it is the government's responsibility to make sure that "everyone in the United States has adequate health care". Providing health care coverage "for all Americans is favored 2-1, even it it means raising taxes".

ATOM members will also inform economic development teams of the benefits telehealth brings to business, industry and real estate proposals. Extending urban health resources into rural areas improves care and reduces overall costs.PILOT PROJECT EXPENSES & FUNDING PROJECTIONS

Cost estimates in this version of the Sustainability Plan are best guess estimates. Once the network design is complete we will be able to predict the true long-term costs of this project.

The Federal Communications Commission (FCC) Universal Service Administration Company (USAC) has pledged \$4,217,688 for pre-approved design, installation and recurring line charges. The University of Arkansas for Medical Sciences (UAMS) has pledged 15% cash match (\$744,298) to be paid toward each line item, prior to submitting bills to USAC. We currently estimate that these committed funds will support the program until January 2012 at which time ATOM will assume complete and total financial responsibility for continuation of the project.

The FCC pilot project will reimburse up to 85% of costs related to network design, installation and recurring line costs. Monthly expenses have been projected based on the following:

¹ Time / Rockefeller Foundation Poll, 17 July 2008: http://www.rockfound.org/about_us/press_releases/2008/071708rf_time_poll.shtml

² Quinnipiac University poll, 22 February 2007: http://www.quinnipiac.edu/x1295.xml?ReleaseID=1020
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Network Design

- May 2010 November 2010
- Total sites included at the time of the FCC design: 310
- After the design was completed, 169 sites were transitioned to BTOP funding

Installation

- March 2012 December 2012
- FCC-funded sites: 141
- BTOP-funded health sites: 283

Recurring Line Charges

- February 2014 forward
- Total FCC-funded sites: 141
- BTOP-funded health sites: 283

When FCC Pilot Project funding is fully expended, health sites will be responsible for their own on-going expenses, utilizing cost recovery plans and the FCC 'regular' program.

CONTINUATION FUNDING: 2014 - Forward

Once FCC Pilot Project funding has been fully expended in December 2014, the Arkansas Telehealth Network will be self supporting. ATOM members are fully committed to the ongoing support of the network through membership fees paid to ATOM on a quarterly basis.

The Centers for Medicaid and Medicare reimburse originating medical facilities a 'facility fee' to help cover non-medical expenses (equipment, space, personnel, line charges, etc.). This facility fee is currently collected by the originating facility, but not applied directly to network operating expenses. (Medical providers on both ends of a telehealth video-consult/intervention are reimbursed separately.) If member organizations see only three qualifying patients per day, network operations will be fully supported.

Projected Expenses by Fiscal Year (July - June):

Cost projections are based on installing one T1 line to each of 300 ATOM members. Installation would begin in January 2011 and 34 members would be added each

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month until the all of the projected members were installed and functional. At that rate all pilot project funds will be dispensed by January 2013.

Projected Income by Fiscal Year (July - June):

FCC: Rural Healthcare Pilot Project funding, expected to be fully expended by December 2012

15% Local Cash Match: Cash match required by the FCC Pilot Project as committed by the University of Arkansas for Medical Sciences (UAMS)

Other Local Funding: Other Local Funding is composed of membership fees.

PROPOSED SOURCES OF PROGRAM REVENUE:

Funds from the FCC Rural Healthcare Pilot Program will be used to establish the Arkansas Telehealth Network including network design, installation and recurring line charges. We expect these funds will be fully expended on or before December 2012. From that time forward, we estimate the program will require approximately \$3 million annually for recurring line charges(which we expect will be a stable, long-term contractual expense).

Once FCC funds and other grant funds have been exhausted, member sites will be assessed a fee equal to 100% of network maintenance and management and recurring line charges. Sources of program revenue that members can use to fund annual on-going membership fees:

- 1) Medicaid/Medicare Facility Fees;
- 2) Health Insurance and other third-party contributions;
- 3) Redirection of travel and training budgets;
- 4) Creation of new telemedicine services;
- 5) Other federal funding sources; and
- 6) State Government contributions.

Members will be required to reimburse participation fees to the ATOM business management on a quarterly basis and those fees will be placed in UAMS-managed account to provide on-going program support when the FCC pilot funding is exhausted. Specific rules for the implementation of the fee procedure are being developed by the ATOM Project Management and Finance Sub-Committee.

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Member sites are responsible for their own membership fees. Members have several methods by which they may recoup the costs of ATOM participation:

1) Patient Encounter Fees: A primary source of sustained funding will be from Medicaid/Medicare reimbursement (\$23.75 per visit). The Centers for Medicare and Medicaid Services allow originating telemedicine sites to bill a "facility fee". Member sites averaging two eligible telemedicine visits per day will be able to fully recover their ATOM membership fees through facility fees alone, as shown in the chart below:

JANUARY - DECEMBER 2012: PROJECTED INCOME							
Annual Projections		e per atient	patients per day	days/year	# sites	Total	
Patient encounter fees	\$	23.75	2	240	300	\$3,420,000	

- 2) Health Insurance & Other Third-Party Contributions: Increasingly, health insurance carriers are covering telemedicine visits and this can also be an important source of revenue to support membership fees. Members will explore the possibility of legislation that would require insurers to reimburse for telemedicine services as has been proposed in New Hampshire (SB 138 of 2009).
- 3) Redirection of Travel and Training Budgets: Members are encouraged to use the network to reduce other expenditures. Rather than send members to distant sites for training, there is a wealth of training (for doctors, nurses, pharmacists and others) currently available on the ATOM network (on-demand and interactive video). Additionally, the network can be used for meetings, pulling together staff from remote sites without the need for travel time or expense.
- 4) Creation of New Telemedicine Services: Members should evaluate services they can provide to others. Members may have healthcare resources they can provide across the network which will generate new revenue to support the cost of membership. The new network will be available 24x7x365. Members should consider developing revenue generating services.
- 5) Other Federal Funding: We will continue to use the UAMS grant office to identify new grant opportunities and apply grants and other revenue sources to network operations.
- 6) State Government Contributions: Healthcare is an essential component of economic infrastructure. A healthy workforce and populace must be seen as an

investment for the state and a key element of economic development. Until and unless we are able to provide quality health care to rural Arkansas, industry will not settle there and citizens will not continue to live there. In order to assure that medical care remains accessible for rural Arkansans, it is reasonable for state government to provide some level of support for telemedicine. State government support of telehealth would allow the network to expand to additional healthcare providers and to provide end-user equipment grants. Telemedicine can bring the expertise of Arkansas' medical centers to every county in the State; add productive years of life to every citizen; and achieve a better utilization of resources.

REFINEMENT OF THIS DOCUMENT

ATOM is envisioned to be a managed statewide network involving hundreds of health organizations. Prior to the network design, we do not presume to know recommended bandwidths, methods of data transmission, vendors, nor the costs of installation and operation. This document is based upon best guess estimates at the time of publication and will be updated on a regular basis as additional information becomes known.

10. Provide detail on how the supported network has advanced telemedicine benefits:

The network first endorsed and funded by the FCC Pilot Project, then further invested by the Broadband Technologies Opportunity Program is creating one of the most substantial telemedicine networks in the country, including:

- 444 sites statewide; pushing the state's Internet2 network deeper into the state, including fiber linkages to all two and four year colleges;
- the creation of robust fiber hubs at the rural community colleges from which pilot project connections will radiate;
- provision telemedicine end-user equipment for all BTOP and FCC project endpoints;
- creation of a network management operations center to assure 24x7x365 connectivity of all healthcare sites; and
- creation of the South Central Telemedicine Training Center at UAMS.

Because of the pilot project, hundreds of separately administered health sites have worked together over the past four years to consolidate and expand existing telehealth

networks. This unique working relationship positioned our state to quickly develop a supplemental proposal for the Department of Commerce. Without the long-term cooperation of ATOM members, it is doubtful we could have achieved the solidarity to warrant a grant of this magnitude.

- 11. Provide detail on how the supported network has complied with HHS health IT initiatives: No change this quarter.
- 12. Explain how the selected participants coordinated in the use of their health care networks with the Department of Health and Human Services (HHS) and, in particular, with its Centers for Disease Control and Prevention (CDC) in instances of national, regional, or local public health emergencies: No change this quarter.